

Talking to Parents about Vaccine Concerns.

Ari Brown, MD, FAAP

FACULTY DISCLOSURE

I do not have a significant financial relationship with the manufacturers of commercial products and/or providers of commercial services discussed in this CME activity.

I do not intend to discuss an unapproved/off-label use of a commercial product/device in my presentation.

7:43 AM



**Controversial autism doctor:
'I'm not going away'**



GREETINGS FROM AUSTIN

OVERVIEW

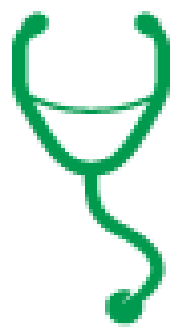
- ☐ How did we get here....and who is to blame?
- ☐ How do parents approach decisions?
- ☐ Are we done yet?
- ☐ What are we doing about it?
- ☐ Risk Communications 101.
- ☐ How to answer the top vaccine questions.

1995

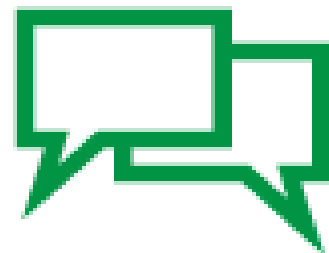


"I'M SORRY DOCTOR, BUT AGAIN I HAVE TO DISAGREE."

SOURCES FOR HEALTH INFORMATION



86%
HEALTH
PROFESSIONAL
(DOCTOR)



68%
FAMILY &
FRIENDS



57%
INTERNET



54%
BOOKS OR
PRINTED
MATERIAL



33%
INSURANCE
PROVIDER

OTHER

5%

SOURCE: *Pew Internet and American Life Project, June 2009, The Social Life of Health Information*

CDC Home Search Health Topics A-Z

National Immunization Program
leading the way to healthy lives

CONTACT US •
HELP •
TRAVELERS •

Public NIP Home Health Care Professionals Partners Media Informacion en Espanol

In the Spotlight...for the Public

- Archived materials from NetConference, "Current Issues in Immunization: Influenza Immunization and Vaccine Supply" (Oct. 14)
- Vaccine Delays & Availability: Flu Vaccine Update (Oct. 7)
- Interim Influenza Vaccine Recommendations – 2004-05 (Oct. 6)
- Flu Bulletin Number 3 (Sept. 28)
- Vaccine Quiz Helps You Decide If You Need Vaccines (Sept. 8)
- More...Archived spotlighted items

Major Topics: Frequently Asked For Vaccines Diseases Resources Vaccine Safety Specific Groups News & Events Statistics & Surveillance

Recommended Vaccination/Immunization Schedules

- Adult vaccination schedule
- Childhood & Adolescent Immunization Schedule
- Catch-up Schedule
- Make a vaccination schedule for your child (birth to 5 years)
- More items...

News & Events

- News, Newsletters, & Listservs
- What's new on this web site?
- Calendar of vaccine related events
- NIP Events and Programs **New!**
- National Adult Immunization Awareness Week (Sept 26-Oct 2)
- More items...

Frequently Asked For

- Parent's Guide to Childhood Immunization
- Vaccine Info. Statements (VIS)
- Vaccine Recommendations from the Advisory Committee

Diseases

- Anthrax information
- Flu information **UPDATED!**
- Smallpox information
- Diseases preventable in **children and adults**

NIP Site Search

Search

IP sub-sites:

- ACIP
- Flu Vaccine
- Immunization Registries
- Vaccines for Children Program
- CASA (Clinic Assessment Program)
- AFIX (Grantee Assessment)
- VACMAN

HOME ABOUT US REPORT A PROBLEM GET INFORMED E-NEWS MEDIA SIGN-IN RESOURCE CENTER MEMBERSHIP DONATION LAWYER REFERRAL CONTACT US

NATIONAL VACCINE INFORMATION CENTER

MAKE A DIFFERENCE, **BECOME A MEMBER**

FREE E-NEWS
VACCINE NEWS OF THE WEEK

HEALTH TALK CALENDAR

ISSUES

- VACCINATION DECISIONS
- FREEDOM IN VACCINATION & INFORMED CONSENT
- STATE INFORMATION
- TRACKING SYSTEMS & PRIVACY
- HOMELAND SECURITY
- HOT LOTS
- NATIONAL VACCINE INJURY COMPENSATION PROGRAM
- INSTITUTE OF MEDICINE REPORTS

Sign an on-line petition to open vaccine databases to independent researchers!

NVIC Responds to Institute of Medicine Report: Vaccines and Autism

Free E-News and Newsletters

AMERICANS FOR VACCINE SAFETY & ACCOUNTABILITY

Website reconstruction funded in part by the Tides Foundation

ACTION ALERT & ADVOCACY

NVIC CONFERENCES

BARBARA LOE FISHER SPEAKS OUT

ARTICLES AND INTERVIEWS

THE BRIAN LEHRER SHOW
Public Health vs Parents' Fears 10/9/03

REDFLAGSDAILY.COM
The Challenge to Mass Vaccination 9/15/03

INSIGHT MAGAZINE
Vaccines fueling autism epidemic? 6/9/03

CBS NEWS
THE EARLY SHOW, 12/04/02

CHRISTIAN BROADCASTING

WELCOME !

Vaccines or immunizations are recommended for every child born in the United States. Vaccinations shouldn't hurt a child but sometimes they do. Before your child takes the risk, find out what it is.

Click on photo to read these children's stories

80% OF PEOPLE SEARCH WITHOUT CHECKING THE SOURCE



INTERNET SEARCHES

Women vs. Men

Surfing for healthcare info

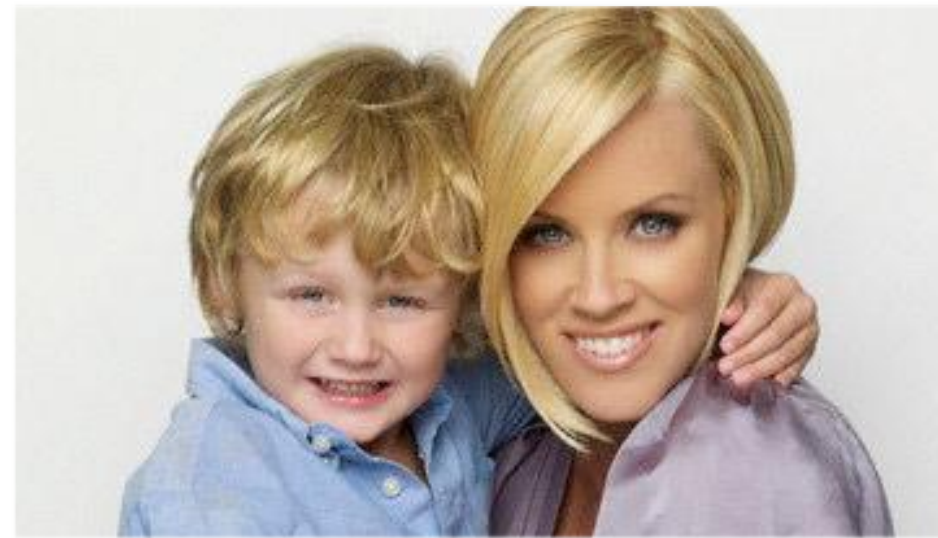
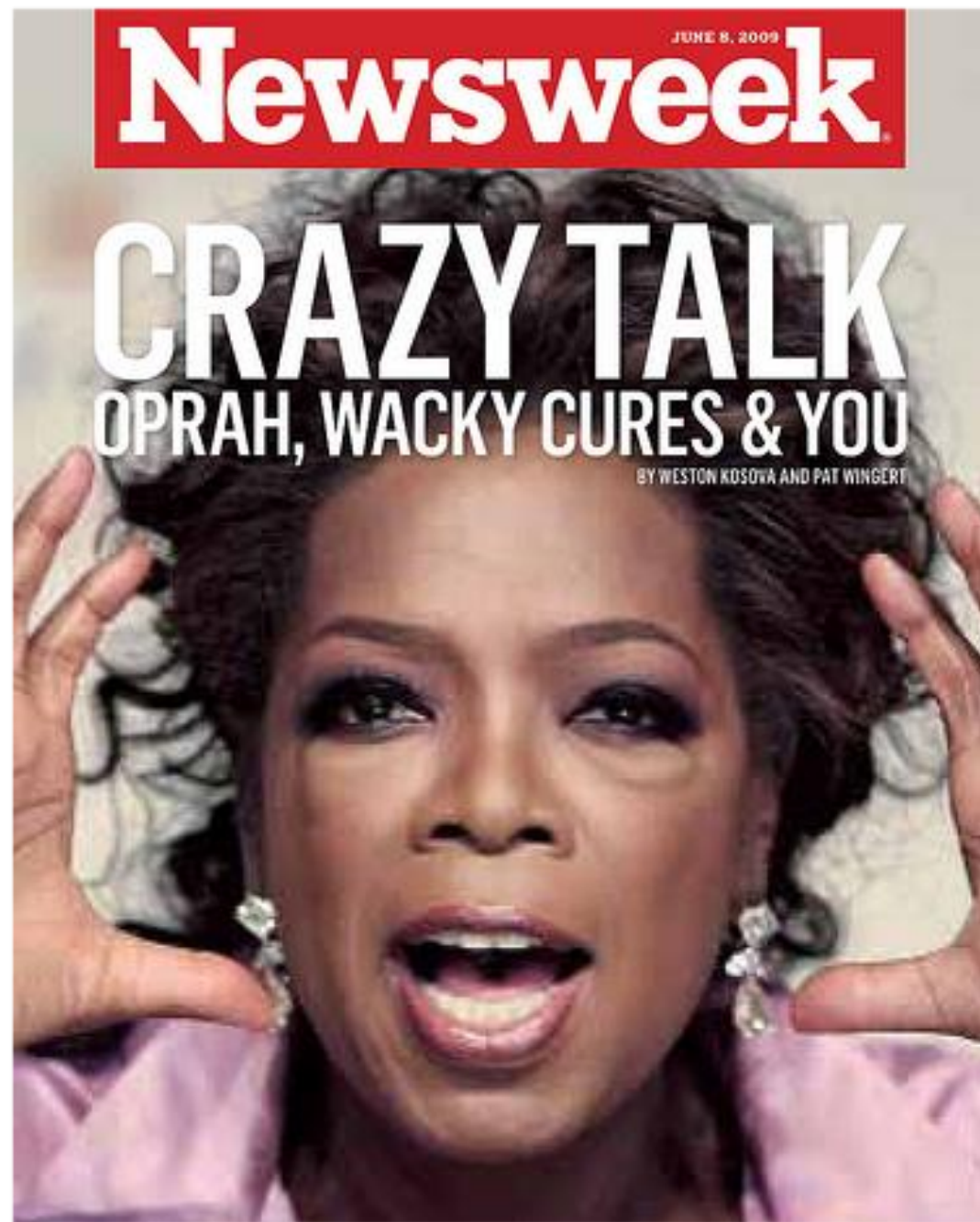


Health Topics Searched Online

In all, 80% of American Internet users have searched for information on at least one major health topic online. Many have searched for several kinds of information.

Health Topic	Internet Users Who Have Searched for Info on It (%)	
	Men	Women
Specific disease or medical problem	54%	72%
Certain medical treatment or procedure	40	54
Diet, nutrition, vitamins, or nutritional supplements	39	48
Exercise or fitness	34	38
Prescription or over-the-counter drugs	29	38
Alternative treatments or medicines	23	33
Health insurance	22	29
Depression, anxiety, stress, or mental health issues	17	25
A particular doctor or hospital	17	25
Experimental treatments or medicines	16	20
Environmental health hazards	16	17
Immunizations or vaccinations	11	14
Sexual health information	12	9

MEDIA, MOM, & MAVERICK



1998-2013

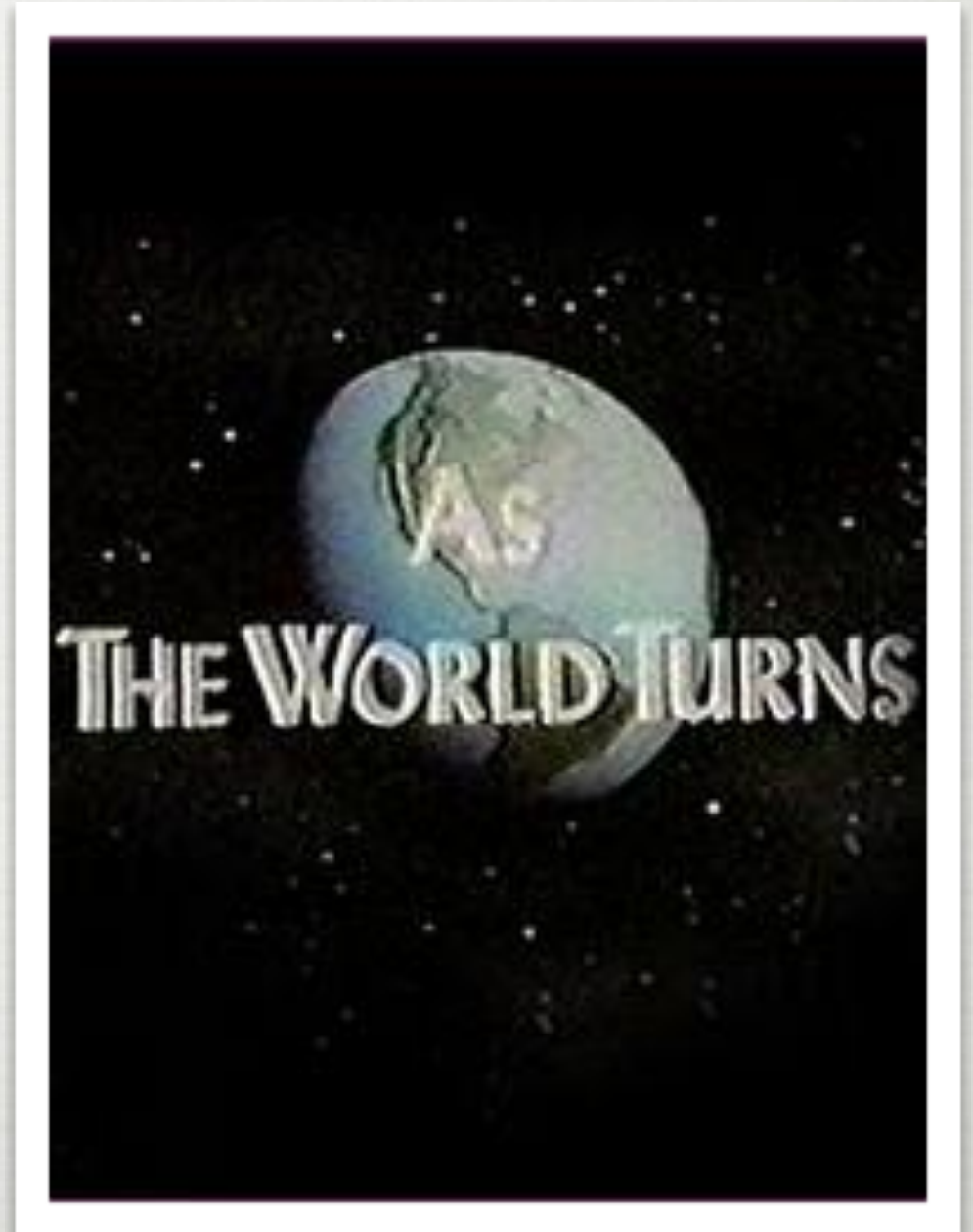
1830

- **1796:** Jenner's smallpox vaccine.
- **1820:** compulsory vaccination.
- **1830:** anti-vaccine groups arrive.



AS THE WORLD TURNS

- ☐ 1998: MMR study
- ☐ 1999: Thimerosal
- ☐ 2001: T-free shots
- ☐ **...AND WE MAKE A
FATAL PR MISTAKE.**



TOO LATE TO THE PARTY

- ❑ 2004: IOM report on vaccine safety
- ❑ 2007: Jenny
- ❑ 2007: Dr. Bob



Omnibus Autism Proceedings 2008

- Hannah Poling awarded monetary compensation for mitochondrial disorder.



VAERS

FAX: 1-877-7...-030



VACCINE ADVERSE EVENT REPORTING SYSTEM

24 Hour Toll-Free Information 1-800-822-7967

P.O. Box 1100, Rockville, MD 20849-1100

PATIENT IDENTITY KEPT CONFIDENTIAL

For CDC/FDA Use Only

VAERS Number _____

Date Received _____

Patient Name:

Last	First	M.I.
------	-------	------

Address

City _____ State _____ Zip _____

Telephone no. () _____

Vaccine administered by (Name):

Responsible Physician _____

Facility Name/Address

City _____ State _____ Zip _____

Telephone no. () _____

Form completed by (Name):

Relation to Patient ☐ Vaccine Provider ☐ Patient/Parent
☐ Manufacturer ☐ Other

Address (if different from patient or provider)

City	State	Zip
------	-------	-----

Telephone no. () _____

1. State

2. County where administered

3. Date of birth / /
mm dd yy

4. Patient age

5. Sex
☐ M ☐ F

6. Date form completed
mm dd yy

7. Describe adverse events(s) (symptoms, signs, time course) and treatment, if any

8. Check all appropriate:

☐ Patient died (date / / mm / dd / yy)
☐ Life threatening illness
☐ Required emergency room/doctor visit
☐ Required hospitalization (days)
☐ Resulted in prolongation of hospitalization
☐ Resulted in permanent disability
☐ None of the above

9. Patient recovered ☐ YES ☐ NO ☐ UNKNOWN

10.	Date of vaccination
-----	---------------------

11	Adverse event onset
----	---------------------

12. Relevant diagnostic tests/laboratory data

mm dd yy AM
Time _____ PM

mm dd yy AM
Time _____ PM



U.S. Department of Health and Human Services
Health Resources and Services Administration

[A-Z Index](#) | [Questions](#)

[HRSA Home](#) [Get Health Care](#) [Grants](#) [Loans & Scholarships](#) [Data & Statistics](#) [Public Health](#)

[HRSA Home](#)

National Vaccine Injury Compensation Program

[National Vaccine Injury Compensation Program](#)

[How to File a Claim](#)

[Vaccine Injury Table](#) of covered vaccines and associated injuries

[Data & Statistics](#)

[Advisory Commission on Childhood Vaccines](#)

[Frequently Asked Questions](#)

National Vaccine Injury Compensation Program

[Share](#) [Print](#) [Email](#) [Facebook](#) [Twitter](#) [Google+](#) [4](#)



On October 1, 1988, the National Childhood Vaccine Injury Act of 1986 (Public Law 99-660) created the National Vaccine Injury Compensation Program (VICP). The VICP was established to ensure an adequate supply of vaccines, stabilize vaccine costs, and establish and maintain an accessible and efficient forum for individuals found to be injured by certain vaccines. The VICP is a no-fault alternative to the traditional tort system for resolving vaccine injury claims that provides compensation to people found to be injured by certain vaccines. The

THE DEMISE OF WAKEFIELD

2010

- ☐ 30 counts of medical misconduct.
- ☐ Loss of medical license.
- ☐ Lancet retracts 1998 study.
- ☐ Resignation from Thoughtful House.

EARLY REPORT

Early report

Ileal-lymphoid-nodular hyperplasia, non-specific colitis, and pervasive developmental disorder in children

A J Wakefield, SH Murch, A Anthony, J Linnell, DM Casson, M Malik, M Berelowitz, A P Dillon, MA Thomson, P Harvey, A Valentine, S E Davies, JA Walker-Smith

Summary

Background We investigated a consecutive series of children with chronic enterocolitis and regressive developmental disorder.

Methods 12 children (mean age 6 years [range 3–10], 11 boys) were referred to a paediatric gastroenterology unit with a history of normal development followed by loss of acquired skills, including language, together with diarrhoea and abdominal pain. Children underwent gastroenterological, neurological, and developmental assessment and review of developmental records. Ileocolonoscopy and biopsy sampling, magnetic-resonance imaging (MRI), electroencephalography (EEG), and lumbar puncture were done where possible. Biochemical, haematological, and immunological profiles were examined.

Findings Onset of behavioural symptoms was associated by the parents, with measles, mumps, and rubella vaccination in eight of the 12 children, with measles infection in one child, and otitis media in another. All 12 children had intestinal abnormalities, ranging from lymphoid nodular hyperplasia to granuloid ulceration. Histology showed patchy chronic inflammation in 11 children and reactive ileal lymphoid hyperplasia in seven, but no granulomas. Behavioural disorders included autism (nine), disintegrative psychosis (one), and possible postviral or vaccinal encephalitis (two). There were no focal neurological abnormalities and MRI and EEG tests were normal. Abnormal laboratory results were significantly raised urinary methylmalonic acid compared with age-matched controls (p=0.03), low haemoglobin in four children, and low serum IgA in two children.

Interpretation We identified associated gastrointestinal disease and developmental regression in a group of previously normal children, which was generally associated in time to possible environmental triggers.

Lancet 1998; **351**: 637–41
See Commentary page

Inflammatory Bowel Disease Study Group, University Departments of Medicine and Histopathology (A J Wakefield FRCS, A Anthony MR, J Linnell FRCS, A P Dillon MRCPs, S E Davies MRCPs) and the **University Departments of Paediatric Gastroenterology** (S H Murch MR, D M Casson MRCP, M Malik MRCP, M A Thomson FRCS, J A Walker-Smith FRCS), **Child and Adolescent Psychiatry** (M Berelowitz FRCPs), **Neurology** (P Harvey FRCS), and **Radiology** (A Valentine FRCS), **Royal Free Hospital and School of Medicine, London NW3 2QG, UK**

Correspondence to: Dr A J Wakefield

Introduction

We saw several children who, after a period of apparent normality, lost acquired skills, including communication. They all had gastrointestinal symptoms, including abdominal pain, diarrhoea, and vomiting and, in some cases, food intolerance. We describe the clinical findings, and gastrointestinal features of these children.

Patients and methods

12 children, consecutively referred to the department of paediatric gastroenterology with a history of a pervasive developmental disorder with loss of acquired skills and intestinal symptoms, including abdominal pain, bloating and food intolerance, were investigated. All children were admitted to the ward for a week, accompanied by their parents.

Clinical investigations

We took histories including details of immunisations and exposure to infectious diseases, and assessed the children. In 11 cases the history was obtained by the senior clinician (JW-S). Neurological and psychiatric assessments were done by consultant staff (PH, MR) with HMS-4 criteria.¹ Developmental studies included a review of prospective developmental records from parents, health visitors, and general practitioners. Four children did not undergo psychiatric assessment in hospital; all had been assessed professionally elsewhere, so these assessments were used as the basis for their behavioural diagnosis.

After bowel preparation, ileocolonoscopy was performed by SHM or MAT under sedation with midazolam and pethidine. Paired frozen and formalin-fixed mucosal biopsy samples were taken from the terminal ileum; ascending, transverse, descending, and sigmoid colon, and from the rectum. The procedure was recorded by video or still images, and were compared with images of the previous seven consecutive paediatric colonoscopies (four normal colonoscopies and three on children with ulcerative colitis), in which the physician reported normal appearances in the terminal ileum. Barium follow-through radiography was possible in some cases.

Also under sedation, cerebral magnetic-resonance imaging (MRI), electroencephalography (EEG) including visual, brain stem auditory, and sensory evoked potentials (where compliance made these possible), and lumbar puncture were done.

Laboratory investigations

Thyroid function, serum long-chain fatty acids, and cerebrospinal-fluid lactate were measured to exclude known causes of childhood neurodegenerative disease. Urinary methylmalonic acid was measured in random urine samples from eight of the 12 children and 14 age-matched and sex-matched normal controls, by a modification of a technique described previously.² Chromatograms were scanned digitally on computer, to analyse the methylmalonic-acid zones from cases and controls. Urinary methylmalonic-acid concentrations in patients and controls were compared by a two-sample *t* test. Urinary creatinine was estimated by routine spectrophotometric assay.

Children were screened for antiendomysial antibodies and boys were screened for fragile-X if this had not been done



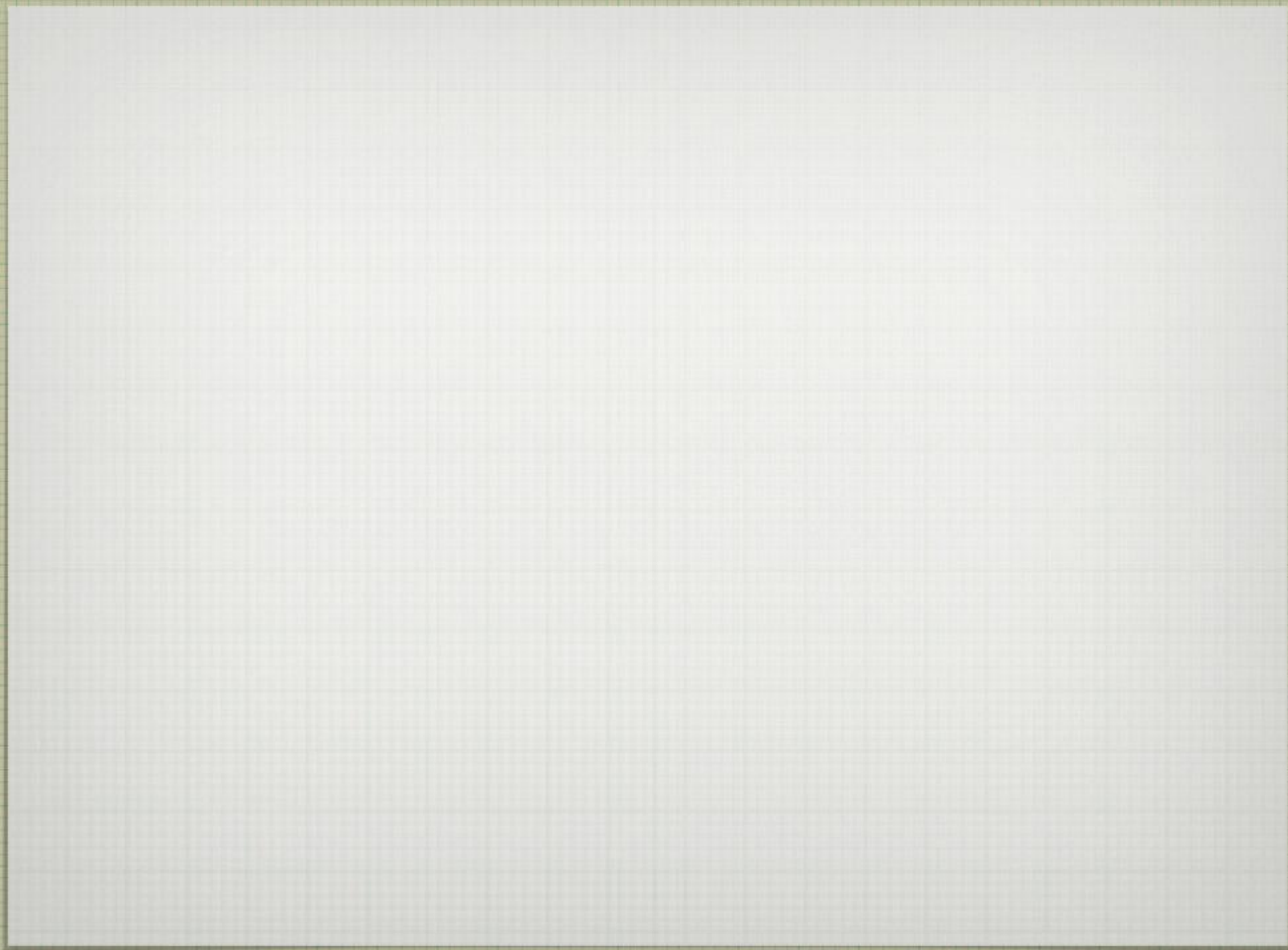
SOCIAL NETWORKS

Window or mirror?

ARE WE TO BLAME?

How much time do we talk about shots?

Nurses	9.2 minutes
Pharmacists	5 minutes
Pediatricians	3.9 minutes
Family Practice Docs	3.1 minutes



OVERVIEW

- ☐ How did we get here....and who is to blame?
- ☐ How do parents approach decisions?
- ☐ Are we done yet?
- ☐ What are we doing about it?
- ☐ Risk Communications 101.
- ☐ How to answer the top vaccine questions.



STEPHANIE KLEIN-DAVIS | The Roanoke Times

PARENT PARANOIA



GREATER GOOD VS. INDIVIDUAL RIGHTS

VACCINE ATTITUDES

- ☐ Believers
- ☐ Relaxed
- ☐ Cautious
- ☐ Unconvinced

—Benin AL, et al. *Analysis of mothers' decision-making about vaccines for infants: the importance of trust. Pediatrics* 117(5) 2006.

VACCINE KNOWLEDGE

- ☐ All groups had poor knowledge of vaccines.
- ☐ Only 2 participants could name a vaccine given to their babies at follow-up interview.
- ☐ 3 participants named autism as a known side effect of the MMR vaccine.

“The pediatrician respected the fact that we wanted to sit and talk for an hour and a half about vaccinations. □ □ He stayed very late one night... □ It wasn't something that they could charge us for...and it's a very busy practice.”

key point

“I don't think doctors have the time or motivations to find me the answers...”

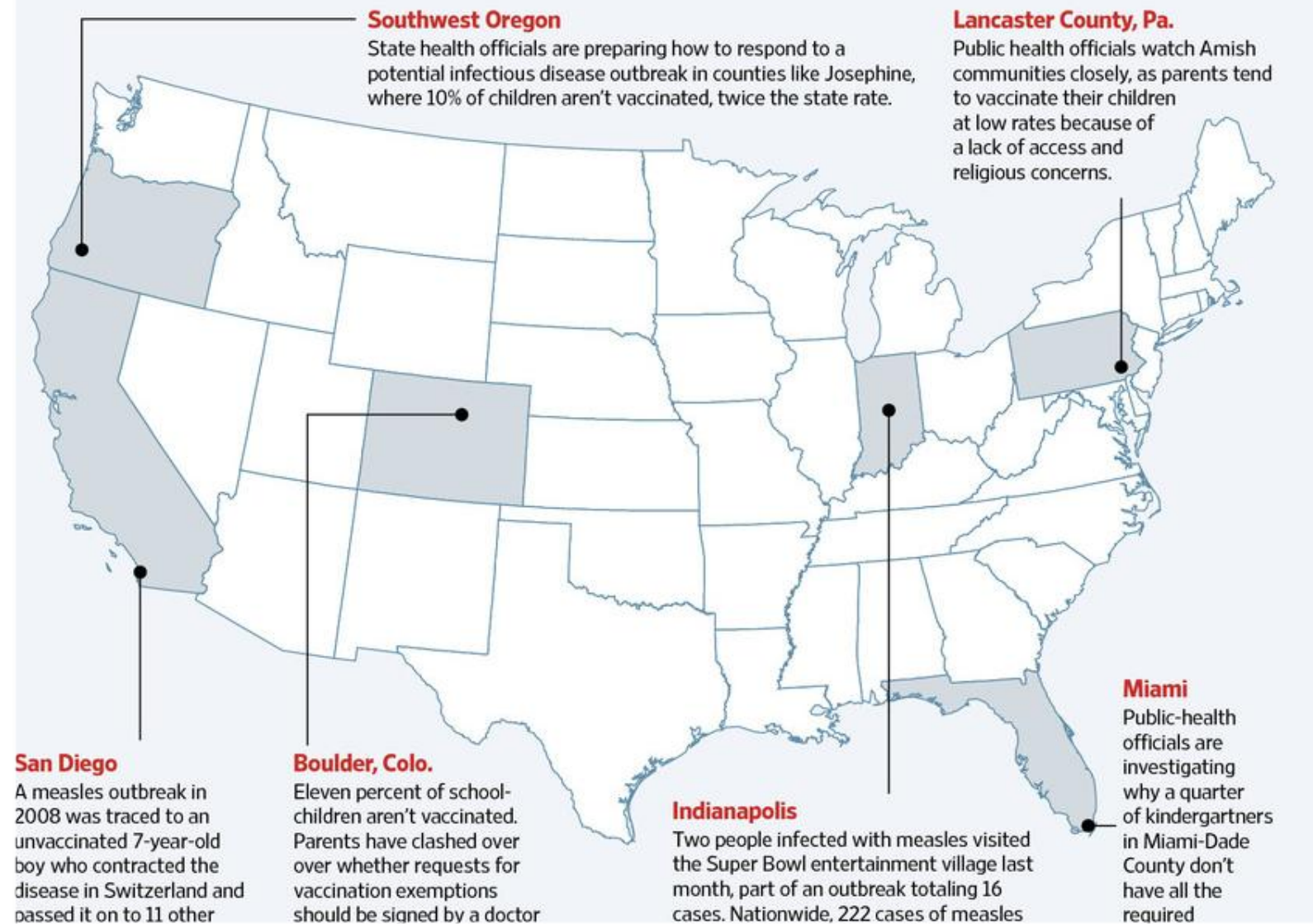
VACCINATORS

- ☐ #1: Trust their healthcare provider.
- ☐ Feel satisfied with the discussion.
- ☐ Feel that it is the right thing to do.
- ☐ Want to prevent disease.

NON-VACCINATORS

- ☐ **Feel alienated by their healthcare provider.**
- ☐ Had a previous bad medical experience.
- ☐ Distrust motives.
- ☐ Trust a homeopath or naturopath.
- ☐ Perceive risk of vaccine more than disease risk.
- ☐ Perceive others will protect them. (Free-riding)

vaccination rates against once common childhood diseases like measles are generally high around the country. But public-health officials worry about a growing number of geographic pockets where rates are low or outbreaks have happened.

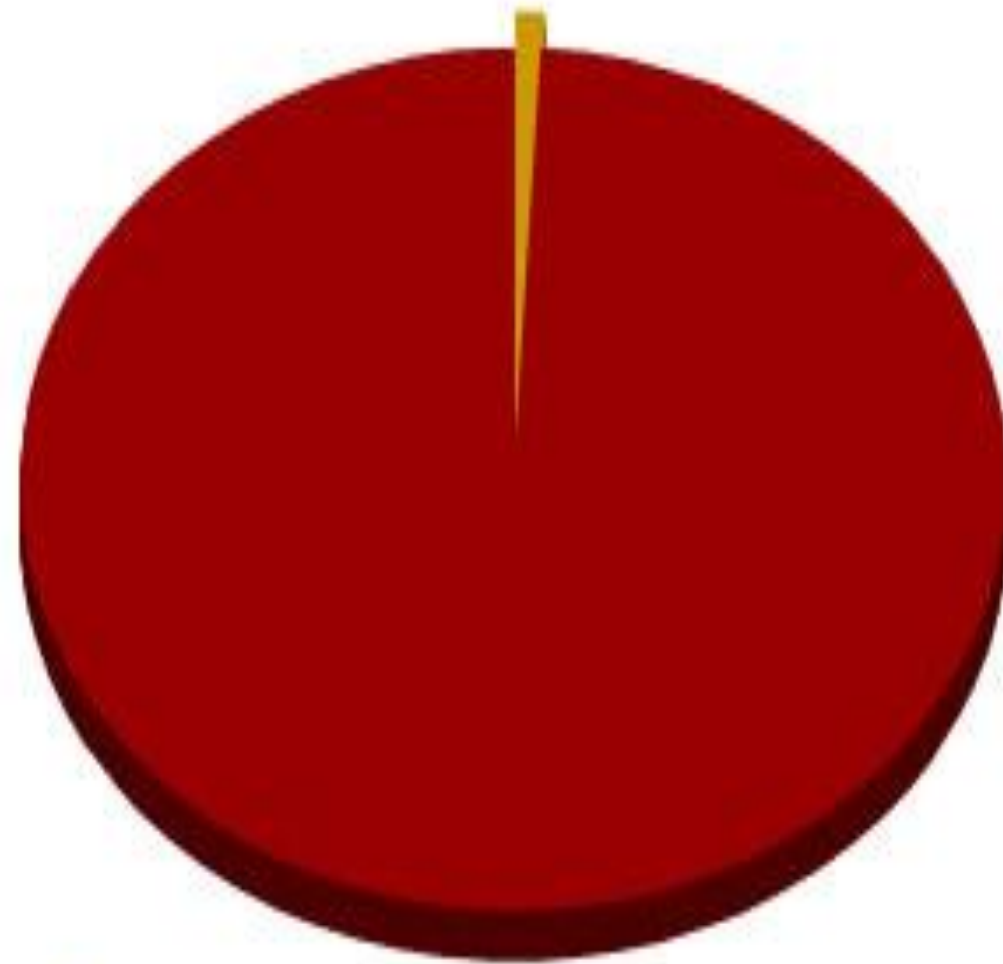


birds of a feather

OVERVIEW

- ☐ How did we get here....and who is to blame?
- ☐ How do parents approach decisions?
- ☐ Are we done yet?
- ☐ What are we doing about it?
- ☐ Risk Communications 101.
- ☐ How to answer the top vaccine questions.

What Will Make Your Book A Bestseller



A powerful concept that will change the world and bring about a new age of peace and prosperity for all.



Appearing on Oprah

■ Jenny McCarthy

■ Bob Sears

20000

15000

10000

5000

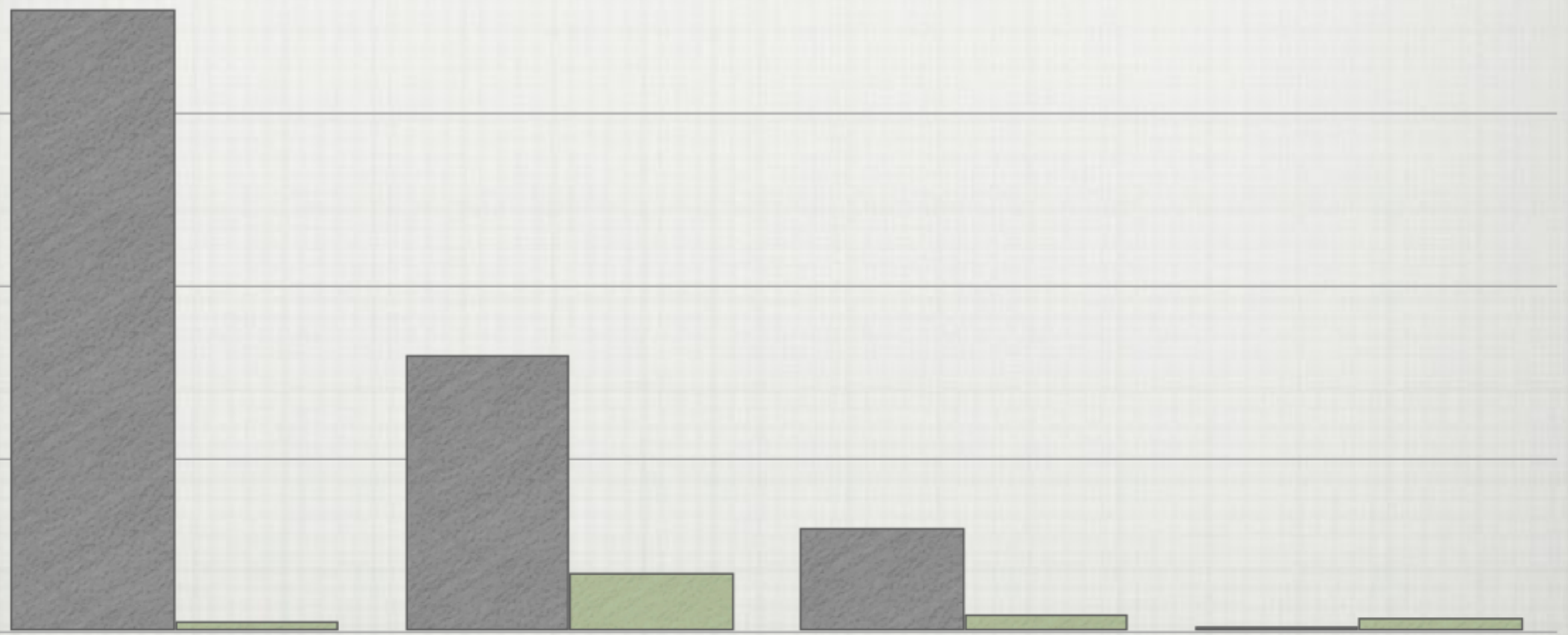
0

2007

2008

2009

2010



[Home](#)[Contact](#)[Donate](#)[Our Current Cause](#)[Our Mission](#)[Z Tejas Fundraiser Event](#)

Our Current Cause



Give Your Support

[Donate](#)[Archives](#)

We are not done...
But we are doing pretty well.

- <1% of American kids ages 19-35 months are unvaccinated.



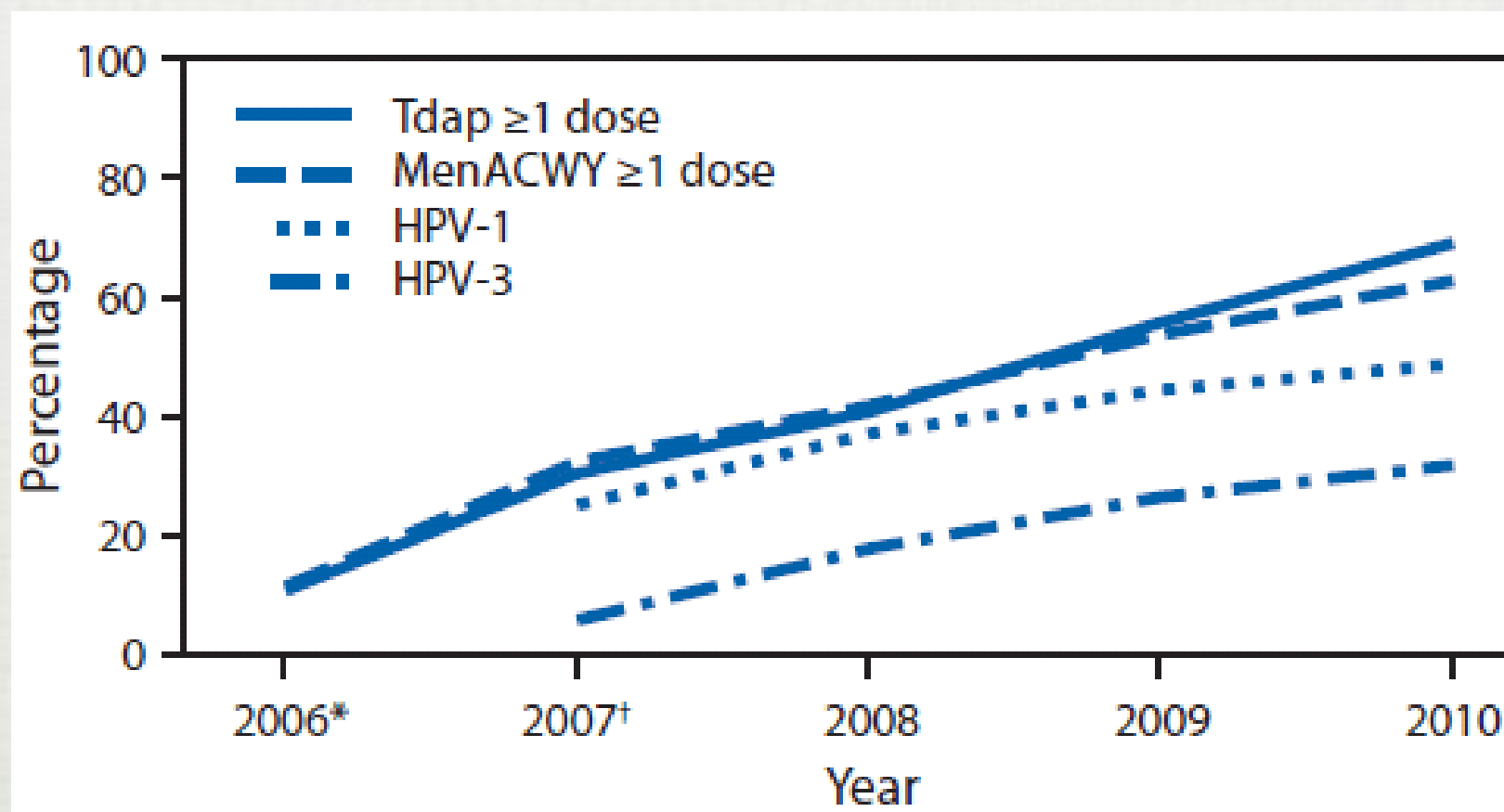
BABIES

TABLE 1. Estimated vaccination coverage among children aged 19–35 months, by selected vaccines and dosages — National Immunization Survey, United States, 2007–2011*

Vaccine	2007		2008		2009		2010		2011	
	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)
DTaP										
≥3 doses	95.5	(±0.5)	96.2	(±0.5)	95.0	(±0.6)	95.0	(±0.6)	95.5	(±0.5)
≥4 doses	84.5	(±0.7)	84.6	(±1.0)	83.9	(±1.0)	84.4	(±1.0)	84.6	(±1.0)
Poliovirus	92.6	(±0.9)	93.6	(±0.6)	92.8	(±0.7)	93.3	(±0.7)	93.9	(±0.6)
MMR ≥1 doses	92.3	(±0.9)	92.1	(±0.7)	90.0	(±0.8)	91.5	(±0.7)	91.6	(±0.8)
Hib†										
≥3 doses	92.9	(±0.7)	90.9	(±0.7)	83.6	(±1.0)	90.4	(±0.9)	94.0	(±0.6) [§]
Primary series	NA		NA		92.1	(±0.8)	92.2	(±0.8)	94.2	(±0.6) [§]
Full series	NA		NA		54.8	(±1.4)	66.8	(±1.3)	80.4	(±1.1) [§]
HepB										
≥3 doses	92.7	(±0.7)	93.5	(±0.7)	92.4	(±0.7)	91.8	(±0.7)	91.1	(±0.7)
1 dose by 3 days (birth) [¶]	53.2	(±1.3)	55.3	(±1.3)	60.8	(±1.3)	64.1	(±1.3)	68.6	(±1.3) [§]
Varicella ≥1 doses	90.0	(±0.7)	90.7	(±0.7)	89.6	(±0.8)	90.4	(±0.8)	90.8	(±0.7)
PCV										
≥3 doses	90.0	(±1.0)	92.8	(±0.6)	92.6	(±0.7)	92.6	(±0.8)	93.6	(±0.6) [§]
≥4 doses	75.3	(±1.3)	80.1	(±1.1)	80.4	(±1.2)	83.3	(±1.0)	84.4	(±1.0)
HepA**										
≥1 dose	NA		70.5	(±1.1)	75.0	(±1.1)	78.3	(±1.1)	81.2	(±1.0) [§]
≥2 doses	NA		40.4	(±1.2)	46.6	(±1.4)	49.7	(±1.4)	52.2	(±1.4) [§]
Rotavirus††	NA		NA		43.9	(±1.4)	59.2	(±1.4)	67.3	(±1.3) [§]
Combined series										
4:3:1:3*:3:1 ^{§§}	NA		NA		48.3	(±1.4)	59.2	(±1.3)	71.0	(±1.2) [§]
4:3:1:~3:1 ^{¶¶}	78.3	(±1.1)	78.7	(±1.1)	77.5	(±1.1)	77.8	(±1.1)	77.6	(±1.2)
4:3:1:3*:3:1:4 ^{***}	NA		NA		44.3	(±1.4)	56.6	(±1.3)	68.5	(±1.3) [§]
4:3:1:~3:1:4 ^{†††}	67.0	(±1.3)	70.6	(±1.2)	70.5	(±1.2)	72.7	(±1.2)	73.6	(±1.2)
Children who received no vaccinations	0.6	(±0.1)	0.6	(±0.2)	0.6	(±0.1)	0.7	(±0.2)	0.8	(±0.2)

Abbreviations: CI = confidence interval; DTaP = diphtheria, tetanus toxoids and acellular pertussis vaccine (includes children who might have been vaccinated with

TEENS



ADULTS

Tdap	8.2%
ZOSTER	14.4%
PNEUMO	59.7%

HEP A	10%
HEP B	40%

OVERVIEW

- ☐ How did we get here....and who is to blame?
- ☐ How do parents approach decisions?
- ☐ Are we done yet?
- ☐ What are we doing about it?
- ☐ Risk Communications 101.
- ☐ How to answer the top vaccine questions.

IMMUNIZATION ALLIANCE



**Not Vaccinated?
No Kisses!**

**Get the adult whooping cough vaccine.
www.VaccinateYourFamily.org**

OVERVIEW

- ☐ How did we get here....and who is to blame?
- ☐ How do parents approach decisions?
- ☐ Are we done yet?
- ☐ What are we doing about it?
- ☐ Risk Communications 101.
- ☐ How to answer the top vaccine questions.

WHAT YOU SAY

- ☐ I VACCINATED MY OWN KIDS...
- ☐ I GET THE FLU VACCINE EVERY YEAR...
- ☐ I WOULDN'T ADVISE ANYTHING DIFFERENTLY FOR YOUR FAMILY.

PUBLIC OPINION SURVEY 2008



When it comes to immunizations, people ask me what I do for my own children.

I tell them yes. When it comes to immunizations, pediatricians agree there is no better way to protect your child from diseases that have plagued children for generations, and still exist today.

For more information about immunizations ask your board-certified pediatrician. The only doctor dedicated to the health and well-being of children.

Visit healthychildren.org

American Academy of Pediatrics

DEDICATED TO THE HEALTH OF ALL CHILDREN™



HOW YOU SAY IT

- ☐ PATIENT WANTS TO BE HEARD.
- ☐ PATIENTS WANTS TO BE RESPECTED. THEY ARE TRYING TO DO WHAT IS IN THE BEST INTEREST OF THEM/FAMILY.
- ☐ PATIENTS WANT AN EXPLANATION FROM A PERSON THEY TRUST.
- ☐ THEY DON'T WANT SCARE TACTICS.
- ☐ THEY DON'T WANT TO BE SCOLDED.



These are not BAD parents.
They are SCARED parents.

GREAT COMMUNICATORS

- ☐ KNOW THEIR AUDIENCE.
- ☐ TALK WITH THEM...NOT TO THEM.
- ☐ CARE.
- ☐ DON'T ARGUE.
- ☐ FIND COMMON GROUND.
- ☐ LISTEN.
- ☐ SPEAK SUCCINCTLY, WITH PASSION & COMPASSION.

THE 3 S'S



SIT DOWN!



SHUT UP!



SHARE!

WHAT CAN YOU DO?

- ☐ Offer reliable sources of info to patients.
- ☐ Talk about it! Face to face & on social networks.
- ☐ Train staff.

PRACTICE WHAT YOU PREACH.

OVERVIEW

- ☐ How did we get here....and who is to blame?
- ☐ How do parents approach decisions?
- ☐ Are we done yet?
- ☐ What are we doing about it?
- ☐ Risk Communications 101.
- ☐ How to answer the top vaccine questions.

MYTH #1

Vax-preventable diseases are rare.

- ☐ 40,000 pertussis cases
- ☐ Measles in NC, NY, TX
- ☐ Flu deaths



MYTH #2

Too many shots.

- ☐ Thank goodness we have so many shots!
- ☐ These are smarter & safer shots.
- ☐ Smallpox, OPV, DTwP.
- ☐ More shots, less immune load.



MYTH #3

Thimerosal causes autism.

- ☐ Thimerosal removed in 2001.
- ☐ Autism rates still rising.



CAUSES OF AUTISM

- ☐ Genetic 10-15%
- ☐ Mature parents
- ☐ Closely spaced pregnancy
- ☐ Extreme prematurity
- ☐ Medications in pregnancy
- ☐ Flu in pregnancy
- ☐ Obesity in pregnancy
- ☐ Folic acid deficiency in pregnancy



MYTH #4

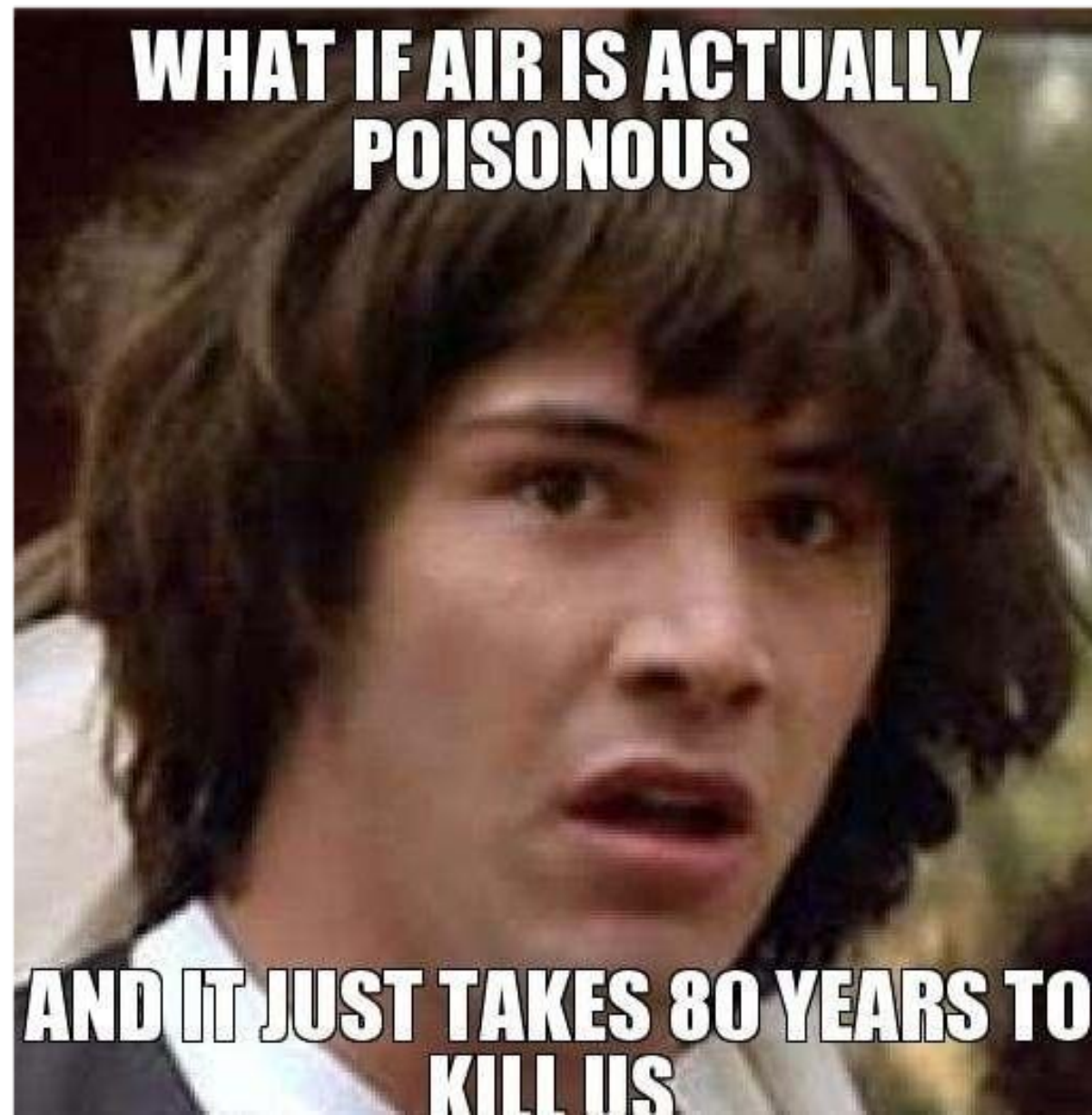
It's a government conspiracy.

- ☐ Just ask your healthcare provider if she vaccinates her family.



MYTH #5

We need to green our vaccines.



VACCINE INGREDIENTS

Preservatives: prevent contamination (phenol, thimerosal before 2001)

Adjuvants: improve immune response in inactivated vaccines (aluminum salts)

Additives: prevent deterioration, sticking to side of vial (gelatin, msg)

Residuals: remains of production process (egg protein, formaldehyde)

ALUMINUM

- ☐ #3 metal in earth's crust
- ☐ 4 mg in all shots given by 6 months
- ☐ 10 mg in 6 months of breastmilk
- ☐ 30 mg in 6 months of formula
- ☐ 120 mg in soy formula



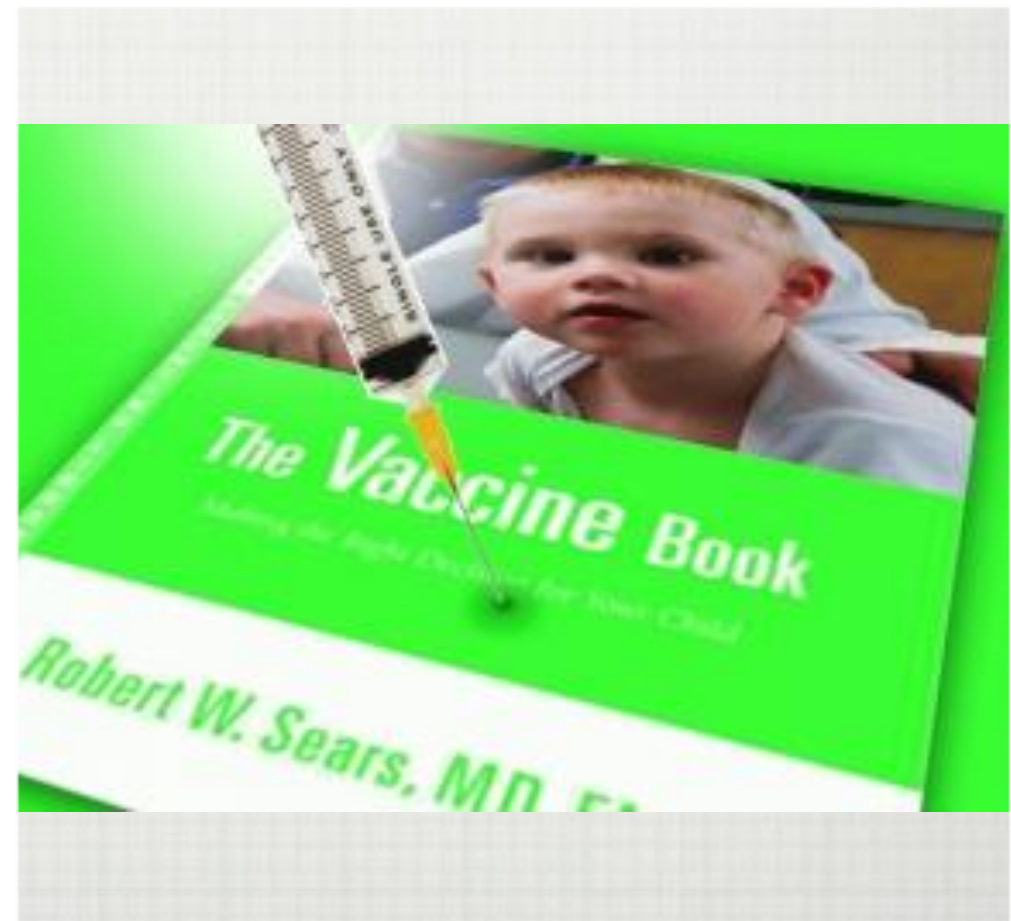
True or false?

- ☐ Live vaccines are weakened (attenuated) in animal or human cell lines.
- ☐ Aborted fetal cell lines have been used to make some vaccines.
- ☐ Recombinant DNA vaccines do not insert themselves into our DNA.

MYTH #6

It's safer to use an “alternative” vax schedule.

- Delaying shots leaves the most susceptible at risk.



“My schedule doesn’t have any research behind it. no one has ever studied a big group of kids using my schedule to determine if it’s safe or if it has any benefits.”

—Dr. Bob Sears, 2009

2010 STUDY SHOWS NO BENEFIT.

**2013 STUDY SHOWS NO
CORRELATION WITH # OF ANTIGENS.**

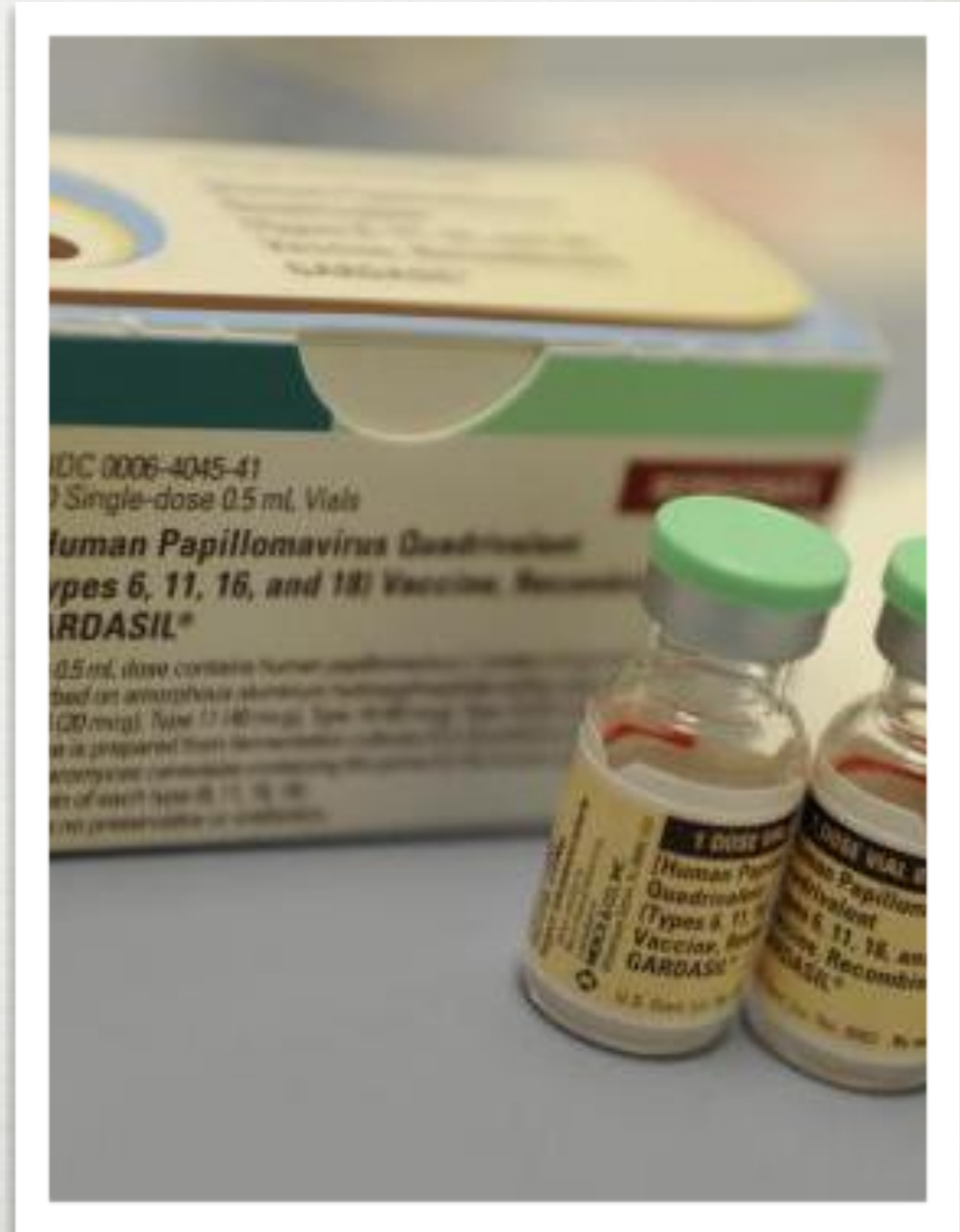
MYTH #7

HPV vaccine is dangerous.



HPV

- ❑ 4000 deaths/yr
- ❑ 6 million infected/yr
- ❑ 25,000 cancers/yr
- ❑ 40 million doses
- ❑ First vax in 2006



HPV and cancer

HPV, the human papillomavirus, infects 6 million people a year, sometimes causing long-term infections. The family of viruses also can cause a wide range of cancers.

Annual cases of HPV-related cancers:

Cervical



Throat/tongue/tonsil



Anal



Vulvar



Vaginal



Penile



Source: American Cancer Society; CDC
By Frank Pompa, USA TODAY

Yes, and the U.S. is seeing a sharp increase in the number of cases of oral and throat cancer especially among young men, caused by HPV infections contracted during oral sex.

Tuesday, September 20, 2011

D2 •

REPORT ON HEALTH

The Rising Risk: HPV now a more-common cause of throat and oral cancers than tobacco

Changing sexual behavior may explain why over the last decade HPV infections have led to a **four- to five-fold increase** in the number of tonsillar and base of tongue cancers, particularly among young men.

Survival rates for mouth and oral cancers are **between 85%-90%**, but oral cancers alone still **kill 8,000 people** in the U.S. every year.

In 2010, the National Cancer Institute estimated there were 12,660 cases of oropharyngeal cancer resulting in **2,410 deaths**. About half of those cases were men and **at least 75% were caused by HPV**.



HPV RELATED CANCERS

So what's the problem?

- ☐ 11% say their kid won't have sex.
- ☐ 17% vaccine isn't necessary.
- ☐ Immunity won't last.
- ☐ It's too new.
- ☐ 16% have safety concerns.
- ☐ 9% doc doesn't advise.



MYTH #8

Tdap vaccine doesn't work.

- ☐ Immunity wears off over time with disease or vaccine.
- ☐ DTwP was more effective.
- ☐ Tdap is underutilized.



RELIABLE SOURCES

- ☐ cdc.gov
- ☐ immunize.org
- ☐ aap.org
- ☐ vaccine.chop.edu
- ☐ baby411.com



Clear Answers and Smart Advice for Your Baby's Shots

By Ari Brown, MD, FAAP



Ari Brown, MD, received her medical degree from Baylor College of Medicine in Houston. She did her pediatric residency at Harvard Medical School/Boston Children's Hospital and has been in private practice in Austin since 1995. Dr. Brown is perhaps best known as the coauthor of the 411 parenting book series — *Expecting 411: Clear Answers and Smart Advice for Your Pregnancy, Baby 411*, and *Toddler 411*. In response to the media attention given to vaccines, autism, and other controversies, this special excerpt from *Baby 411* is available free of charge to help educate families.

Vaccines. Autism. Controversy. As a new parent (or parent-to-be), it's hard not to hear the great debate in parenting circles these days — do vaccines cause autism? If not, what causes autism and why is it on the rise?

Let's start at the beginning. Just what is autism?

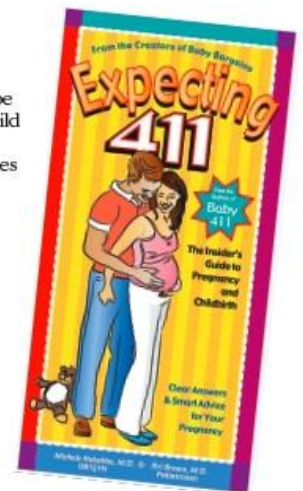
Q. What is autism?

Autism Spectrum Disorder (ASD) is really a collection of several disorders that cause children to have three abnormal areas in common: social skills, communication skills, and repetitive or obsessive traits. Specialists use the terms ASD and Pervasive Developmental Disorders (PDD) interchangeably. To add even more confusion, Pervasive Developmental Disorder, not otherwise specified (PDD-NOS), and Asperger's Syndrome also are disorders that fall under the ASD umbrella.

There is a very broad range of severity within ASD. A child may have normal intelligence and language, but be socially

There also are some unusual behaviors. Cuddling may not be soothing. In fact, an autistic child may get very upset by being touched. Bright lights and noises often bother them. Because they are bugged by the outside world, they may turn inward and find comfort in repetitive behaviors (rocking, head banging, spinning). Autistic children may have little interest in playing with toys. Or they may play in an odd way — such as using a phone as a comfort object.

Bottom line: Children with autism have autism long before their first birthdays,





"I'm mad as hell and I'm not gonna take this anymore!"

TEACHING MOMENTS.

Build a relationship. Develop trust.

Educate!